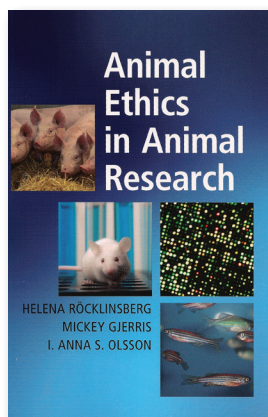


## BOOK REVIEWS, NOTES AND COMMENTS

Edited by

**Federica Napolitani Cheyne**



### ANIMAL ETHICS

#### IN ANIMAL RESEARCH

Helena Röcklinsberg, Mickey

Gjerris, I Anna S Olsson

Cambridge University Press;

2017.

198 p.

ISBN 9781108430685

€ 36,40

I have been lecturing on issues related to animal experimentation for many years, and came to the realisation that I was repeating the same old concepts, and needed fresh material, more up-to-date, using a more exciting multi-disciplinary approach. I began to attack the extensive and rather dispersive literature on ethics and animal experiments, when this little volume landed on my desk. It was exactly what I was looking for, and could not expect less. The three authors are experienced and engaging researchers, working in different areas of life sciences in which ethics play an important role. The other characteristic that make their effort particularly welcome is their willingness to adopt a multidisciplinary attitude, and this is a very needed approach, especially when it comes to animal experimentation.

This book is a convincing introduction to the complex issue of the interaction between ethics and animal research. It does not tell the reader whether it is right or wrong to use animals in research, or to suggest how animal experiments should be considered: the main purpose is to assist the reader to take informed decisions on these complex matters (the availability of partial information to the general public is one of the main problems with animals experimentation). Throughout this book, the style remains extremely clear and the argumentations are easy to follow. An example is the section dedicated to the different ethical stands on animal experiments. Different ethical theories are explained in simple language, and authors provide the readers with the basic concepts necessary to understand different points of view. It is then up to the reader to search for more literature to deeper some arguments. What is really interesting, is that the different ethical theories are applied to different cases using animals in experiments, with the effect of making ethical reasoning more in tune with the actual reality of daily scientific practice.

The general focus is on animal experiments in EU, but there is an informative, interesting chapter on ethi-

cal evaluations outside Europe, with reference to USA, Canada and other continents. We can proudly say that Europe appears to be advanced, compared to other national realities, in the norms regulating animal research.

One of the strengths of the book is the attention the authors dedicate to the social value animal experiments have. Researchers have generally dismissed the importance of public understanding on their experimental work, and the subsequent social responsibility. This responsibility is twofold: on one side there is the obligation to produce good, replicable and meaningful science, with a reliable translational value in the case of applied research; on the other, society demands a respectful treatment of animals, to avoid unnecessary suffering (although we learn here that animal experimentation is not a major concern for the general public, at least in Great Britain and Denmark). A series of guest authors illustrate different ways in which the general public can be involved and why, in relation to decisions taken with animal experiments. It is something to really consider, and an important way forward, towards an increased level of transparency. Transparency is a key word for Olsson and his colleagues. This is especially relevant when it comes to basic research where the crucial harm/benefit analysis, on the feasibility of a particular research, becomes difficult to apply. What is the benefit of a curiosity-driven research? Why and how the public can accept the use of animals for this kind of research? The authors' answer, and I agree, is to increase the level of transparency, to be clear as much as possible about the reasons behind a certain research, and why it is important. We can definitively say that the era of researchers isolated in their ivory mystery towers has ended. Science is part of society, and animal experimentation is a very interesting and appropriate case-study in this respect.

Now more than ever the discussion on this issue requires an informed and balanced approach, to provide a safe background on which to articulate a respectful and useful discussion. We need to learn from different perspectives, as found in different parts of the book, not to build impenetrable walls around our beliefs. This is the only way in which the quality of life of the animals used in research can improve, together with the quality of research, and improve public understanding (if not acceptance) of what is going on in research laboratories.

The only criticism I have is that the final chapter is a bit of a let-down. I was expecting a more in-depth discussion on the future of animal research. Instead we just learn that more transparency will be needed, and that animals will not leave research laboratories for still some time, and their use will continue to represent an ethical challenge. This information is easily gathered just going through the preceding chapters.

I recommend this book to anyone involved in courses

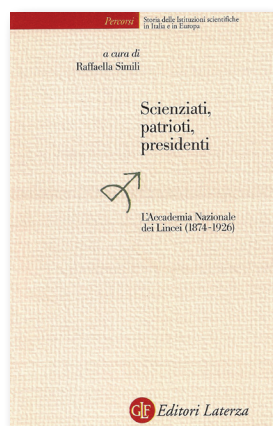
on ethics of research, and animal experimentation in general. At the end of each chapter the authors provide the readers with questions which are perfect material for exercises and public discussions in a classroom. The book is a very valuable introduction of general issues that can be further elaborated on with the help of the provided references, and adopting the balanced and multidisciplinary approach the authors so convincingly apply in their text. And for myself, for sure, I have now the possibility to refresh my power point presentations!

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Science". To this author, Simili, as well as others, have dedicated a variety of specialized books and papers.

This collective volume is a masterpiece on how to leave memories of the progress of scientific knowledge while providing archivistic materials for the generations to be. Its reading is therefore useful for militant scientists, particularly those exerting responsibility role as administrators. Obviously, scientists willing to be in charge of the future of younger professionals should also have consideration for our national heroes.

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**SCIENZIATI, PATRIOTI,  
PRESIDENTI**  
**L'Accademia Nazionale  
dei Lincei (1874-1926)**  
Edited by Raffaella Simili.  
Roma-Bari: Editori Laterza;  
2012.  
123 p.  
ISBN 978 88 420 9966 6.  
€ 20,00

[*Scientists, patriots, presidents.*  
*The Accademia Nazionale  
dei Lincei (1874-1926)*]

This book, issued within the volumes of the Laterza series on the History of Scientific Institutions in Italy and Europe, is the result of a 3-year stage of professor Raffaella Simili at the Centro Interdisciplinare of the Accademia dei Lincei. The author is the most distinguish Italian historian of science with specific interest for the biographies of women scientists having devoted a brilliant life-long career to the "mining" of female histories in a typical male-dominated scenario.

The Italian CNR (National Council for Research) started as a rib of the Accademia dei Lincei thanks to its founder/CNR President from 1923 to 1926, Vito Volterra. Highly recognized at international level, Volterra was a mathematician and senator, and exerted a prominent role in establishing new trends in Italian (and European) science up to the moment when he was expelled from the public landscape due to his Jewish origin and for his firm opposition to the emerging fascism.

Giovanni Paoloni, the son of an important chemist having worked at our ISS for decades, arranged the pivotal chapter on Quintino Sella (Lincei President from 1874 to 1884). Carlo G. Lacaita reported of Francesco Brioschi (1884-1898); Angelo Guerraggio and Rossana Tazioli on Eugenio Beltrami (1898-1900). Simili herself magisterally depicted Vito Volterra's presidency (1923-1926), entitling her contribution "Mister Italian



**NOSTRO SALE QUOTIDIANO**  
**Come evitare la morte  
bianca**  
Riccardo Paloscia  
Montefiascone: Editrice  
Silvio Pellico; 2017.  
132 p.  
ISBN-10: 8894170233.  
€ 8,00.

[*Our daily salt: How to avoid  
the white death*]

This book on the planet salt has a subtitle that certainly affects: how to avoid white death. The reduction of salt consumption is the central topic of the proposed text.

In fact, according to the latest WHO indications, raised blood pressure is the leading risk factor for the global disease burden and is estimated to cause 9.4 million deaths every year – more than half the estimated 17 million deaths caused by cardiovascular diseases annually.

The author proposes a very interesting route on all aspects of salt and uses the interview formula to a hypothetical patient to highlight the damage caused by excessive consumption of salt in the diet and illustrates the two main mechanisms of salt action on the human body that cause damage to health: stimulation of the sympathetic nervous system induced by salt to produce a greater amount of adrenaline that causes a constriction of the arteries and naturally to a greater water retention due to the presence of salt dissolved in the blood which contributes to an increase of blood volume and pressure on arterial walls.

High consumption of sodium leads to increases blood pressure, risk of heart disease, stroke, high risk of infection of *Helicobacter pylori*, gastritis and stomach tumors, increased risk of osteoporosis through loss of calcium in the urine.

The indications of the Italian Ministry of Health (which follows the WHO guidelines) suggest that a normal consumption of sodium should be 2 grams per day, equivalent to 5 grams of salt per day: a teaspoon.

Sodium is mainly consumed as salt which in the diet can come from processed foods, either because they contain large amounts of salt (such as ready meals, processed meats like bacon, ham and salami, cheese, salty snack foods and instant noodles, among others) or because they are consumed frequently in large amounts (such as bread and processed cereal products). Salt is also added to food during cooking (bouillon and stock cubes) or at the table (soy sauce, chilli sauce, fish sauce and table salt). Dietary patterns are being transformed by the increasing production of more and more processed food, rapid urbanization and changing lifestyles. Highly processed foods are becoming increasingly available and affordable.

The easiest and most cost-effective way of addressing this is simple: reduce the amount of salt people eat. Lowering salt consumption is a practical action which can save lives, prevent related diseases.

The author explains, for example, that the pasta could be cooked without salt if you add an already salted seasoning like tuna or if we want to salt the water it could be reduced or eliminated. The easiest advice to follow seems to be not to add salt on foods that already contain it naturally (meat, fish, salad, vegetables, cheese, etc.). The book is accompanied by a list and description of the largest types of salt in the world (with historical, cultural, chemical composition and uses) and a small guide to recipes that do not include salt and which helps the reader to introduce the small secrets of counter-cooking into daily practice: for example the abundant use of spices, herbs, citrus fruits and vinegar that make food tasty and that offers new culinary paradigms and new tastes for our palate. The chapter dedicated to recipes recommends no salt or a small amount of Himalaya salt. In this regard, perhaps it would be better to indicate a type of salt that does not have excessive costs and at least contains the correct amounts of iodine.

In order to reduce salt in the diet a joint action is required which implies more information on the media in general and effectively involving general practitioners. An example could be offered by restaurants could contribute to salt reduction by not salting meat and fish in advance but leaving the customer the choice.

The Author explains that children also take more sodium than the recommended one that is associated

with an increase in pressure becoming a real cardiovascular risk factor. Children like adults take the majority of sodium through processed and consumed food away from home.

The text integrates the INRAN Guidelines (Italian National Research Institute for Food and Nutrition) that carries out research, information and promotion activities in the field of food and nutrition for the purposes of consumer protection and improvement quality of agro-food productions. Following also a summary of the WHO guidelines on salt. One of the targets agreed by WHO Member States is a 30% relative reduction in mean population intake of salt/sodium by 2025. For WHO it is essential that this target is met in order to meet the overall goal of a 25% reduction in premature mortality from NCDs (noncommunicable diseases).

The text is not limited only to the scientific and pathological aspects of excessive sodium intake but tries to explain the socio-cultural and sociological motivations that lead the majority of us to consume more salt than necessary and to consider this chemical element as the most precious of all the periodic table. The reader will find really interesting and rich in ideas the cultural path that addresses the history of salt in religions, in music, in the figurative arts, in poetry, fairy tales, dreams, famous quotes and proverbs. In a civilization so "rich" of salt, to be able to put it anywhere and in abundance, we should remember, daily, that the preciousness attributed to the past was due to many aspects but now in the age of consumerism its excessive consumption can lead to serious consequences and death.

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